

# DRAINAGE REQUIREMENTS

When submitting permit applications for evaluation of drainage impacts, the following information should be furnished:

## 1) REPORT

A narrative report including a description of the existing drainage conditions, the proposed revisions, and the effects of the proposed changes on existing conditions.

## 2) MAPS AND/OR DRAWINGS

Maps and/or drawings sufficient to show all pertinent features of the proposed modifications. This may include site maps, draining area maps, contour maps, grading plans, structure profiles, channel profiles, etc.

## 3) CALCULATIONS

Hydrologic and Hydraulic calculations for design, discharge, water surface profiles, flow depths and flow velocities as applicable.

The attached guidelines may be used in reviewing permit applications for completeness prior to submittal to Roadway Drainage Section.

# Roadway Drainage Section

## Permit Guidelines

Permit Name: \_\_\_\_\_

Location: \_\_\_\_\_

1. Are existing conditions adequately described? \_\_\_\_\_
2. Are the proposed changes adequately described? \_\_\_\_\_
3. Are all plans and details provided? \_\_\_\_\_
4. Is a site map included? \_\_\_\_\_
5. Are drainage area maps included? \_\_\_\_\_
6. Are any known drainage problem locations discussed? \_\_\_\_\_
7. Is the permit area within a floodplain? Area Flood Insurance Maps (FIRM's) available, and if so, are they included? Has a regulatory floodway been established? Will there be an increase in the 100 year water surface as a result of the proposed project? \_\_\_\_\_
8. Are there any flood control projects existing or planned for the project area? Are there any existing drainage studies for the area? \_\_\_\_\_
9. Have the hydraulic impacts of the proposed design been evaluated: scour, ponding, flow diversions, bank protections, etc.? \_\_\_\_\_
10. Are all the hydraulic and hydrologic computations included? \_\_\_\_\_